Amendments to the Specification:

Please replace paragraph [7] with the following amended paragraph:

[7] Once the necessary operational data has been collected, controller 10 begins the simulation and instructs interpreter 20 to begin interpreting the trial protocol and the drug model in order to sequentially simulate each subject in the simulation. One conventional method for running a trial simulation is to compute each schedule before the subject begins. This pre-determined ~~scheduled~~ schedules can then be saved in data storage area 25. The multitude of saved schedules are then combined into a single master schedule which is then followed by controller 10 for the entire simulation. This conventional solution lacks the flexibility to modify any schedule in response to data generated during the simulation, as is required for dose adjustment protocols.

Please replace paragraph [12] with the following amended paragraph:

[12] In one embodiment, a system receives, as input, data representing a clinical trial protocol. This information is sorted into a plurality of schedules. The schedules can include dosage schedules, observation schedules, [[an]] and various other types of schedules. Other and further aspects and features of the invention will become apparent from the following drawings and detailed description.

Please replace paragraph [33] with the following amended paragraph:

[33] Fig. 2 is a block diagram illustrating an overview of a clinical trial simulator 7 according to an embodiment of the present invention. Simulator 7 may comprise a controller 30, a protocol interface 40, a translator 50, and a compiler 60. Preferably, simulator 7 is communicatively coupled with a data storage area 70. Data storage area 70 can [[be]] reside on a volatile or persistent storage device. For example, data storage area 70 can be a traditional database, a hard drive with a file system, a volatile memory, a persistent memory, or various other types of storage devices or structures capable of temporarily or persistently storing information.

Please replace paragraph [42] with the following amended paragraph:

[42] Fig. 3A is a block diagram illustrating an example trial definition file 92 located in data storage area 72 according to an embodiment of the present invention. Trial definition file 92 preferably contains each of the various schedules that comprise the defined clinical drug trial. For example, a single clinical ~~trail~~ trial may include a dosing schedule and an observation schedule. Each of these schedules are preferably contained in ~~trail~~ trial definition file 92.

Please replace paragraph [67] with the following amended paragraph:

[67] Once the parameters have been determined, a header block is preferably created in the file that corresponds to the parameters, as shown in step 274. Additionally, the header block may include the various variables that may be used in the function. The set of variables used by the particular function can be important, depending on the high level programming language selected. For example, a high level programming language that employed dynamic allocation of memory space for locally declared variables or locally accessed global variables may not need to ~~determined~~ determine the size of the memory to be allocated.